

Pension Funding

City of Torrance, CA



Understanding Pension Funding



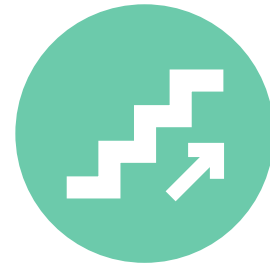
Pension Basics



Hurdles and Other Considerations



How is your agency
doing relative to
your funding
targets?



Next Steps

Pension Basics

Pension Jargon Glossary

- Assumption = Target, Goals or Expected Results
- Experience = Actual Results
- Discount Rate = Long-term *assumed* Investment Rate of Return
- Normal Cost = Initial savings rate (Employee and Employer contributions)
- Amortization of UAL = Annual amount needed to get back on track
- Annual Required Contribution = Normal Cost + Amortization of UAL
- Present Value of Projected Benefit (PVPB) = Savings goal at desired retirement age
- Accrued Liability (AL) = Target funding progress at a given point of time
- Unfunded Accrued Liability (UAL) = Amount actual savings falls short of funding goal



Retirement Benefits

Provided through California Public Employees Retirement System (CalPERS), a multi-employer pension & health care administrator

Promised benefit is made by the contracting agency and thus the local agency's obligation not CalPERS

Once the promised benefit is made, the benefit can only be changed prospectively per the California Constitution "California

Rule"
Exiting CalPERS is not a practical option, the termination liability is cost prohibitive.

Revised benefit structure for employees hired on or after January 1, 2013 due to Public Employees Pension Reform Act (PEPRA)

Torrance has 3 CalPERS plans: Miscellaneous, Safety Police, Safety Fire.

Benefit Tiers – Miscellaneous Employees

	<i>Miscellaneous Tier 1</i>	<i>Miscellaneous 2010 Tier</i>	<i>Miscellaneous Tier 3 PEPRA</i>
Hire Date	Before 2010 Tier created (Aug 2010-Feb 2011)	After Aug 2010-Feb 2011; depending on MOU	On or after 1/1/13
Formula	2% @ 55	2% @ 55	2% @ 62
Final Pay Period	12 Months	12 Months	36 Months
COLA	2% per year	2% per year	2% per year
Employee Contributions	Employer Paid Member Contribution (EPMC) 7%	Employee Pays 7% of Pensionable Compensation	Employee Pays 6.75% of Pensionable Compensation

Benefit Tiers – Safety Police

	<i>Safety Police Tier 1</i>	<i>Safety Police 2010 Tier</i>	<i>Safety Police Tier 3 - PEPRA</i>
Hire Date	Before 2010 Tier created (Mar 2011-Jan 2012)	After Mar 2011-Jan 2012; depending on MOU	On or after 1/1/13
Formula	3% @ 50	3% @ 50	2.7% @ 57
Final Pay Period	12 Months	12 Months	36 Months
COLA	2% per year	2% per year	2% per year
Employee Contributions	Employer Paid Member Contribution (EPMC) 9%	Employee pays 9% of Pensionable Compensation	Employee Pays 12.50% or 14.75% of Pensionable Compensation

Benefit Tiers – Safety Fire

	<i>Safety Fire Tier 1</i>	<i>Safety Fire 2010 Tier</i>	<i>Safety Fire Tier 3 - PEPPRA</i>
Hire Date	Before 2010 Tier created (Mar 2011-Jan 2012)	After Mar 2011-Jan 2012; depending on MOU	On or after 1/1/13
Formula	3% @ 50	3% @ 50	2.7% @ 57
Final Pay Period	12 Months	12 Months	36 Months
COLA	2% per year	2% per year	2% per year
Employee Contributions	Employer Paid Member Contribution (EPMC) 9%	Employee Pays 9% of Pensionable Compensation	11.25% or 12% of Pensionable Compensation

Defined Benefit – Sample

What does 2.0 @ 55 Mean?

- 2.0 is the benefit factor if employee retires at age 55.
- The benefit factor is multiplied times the years of service to derive a % of pensionable pay
 - Pensionable pay **does not** include any accrual cash outs or overtime payments made to employees.
 - SCO GCC Report and Transparent California reported compensation is **not** necessarily all eligible for pension calculations
- 30 Years of Service X 2.0 = 60% of Final Year
 - Final Year of \$100,000 = \$60,000 Lifetime Annual Benefit
- Employees could retire as early as 50 and receive a reduced benefit factor.
 - For example: 1.9% at age 54, 1.7% at age 53, 1.6%

Employee Count by Benefit Group*

Breakdown of Groups

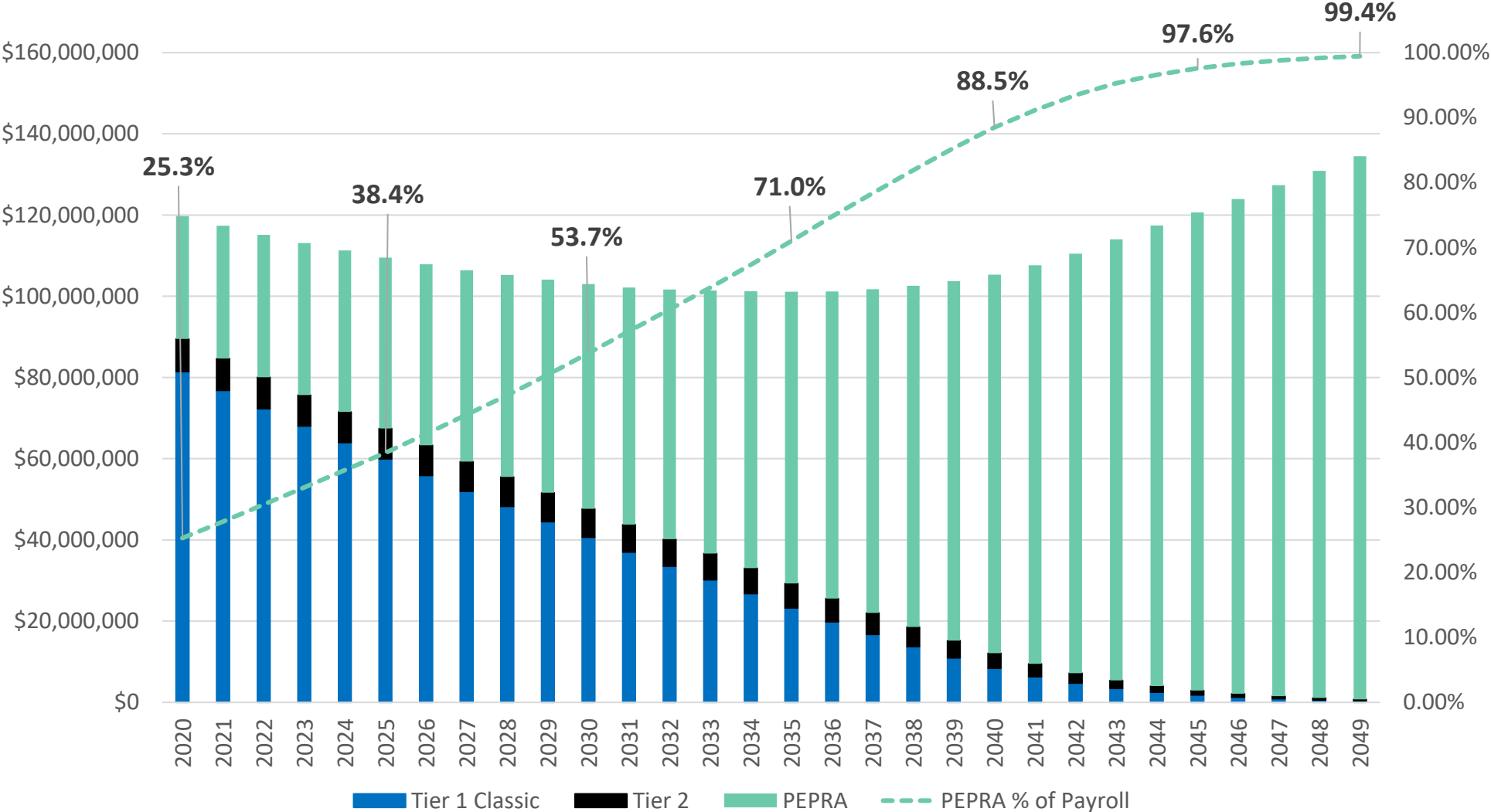
Total	Classic With EMPC**	Classic “2010” Without EPMC*	PEPRA
1,199	627	103	469

Ratio	52%	9%	39%
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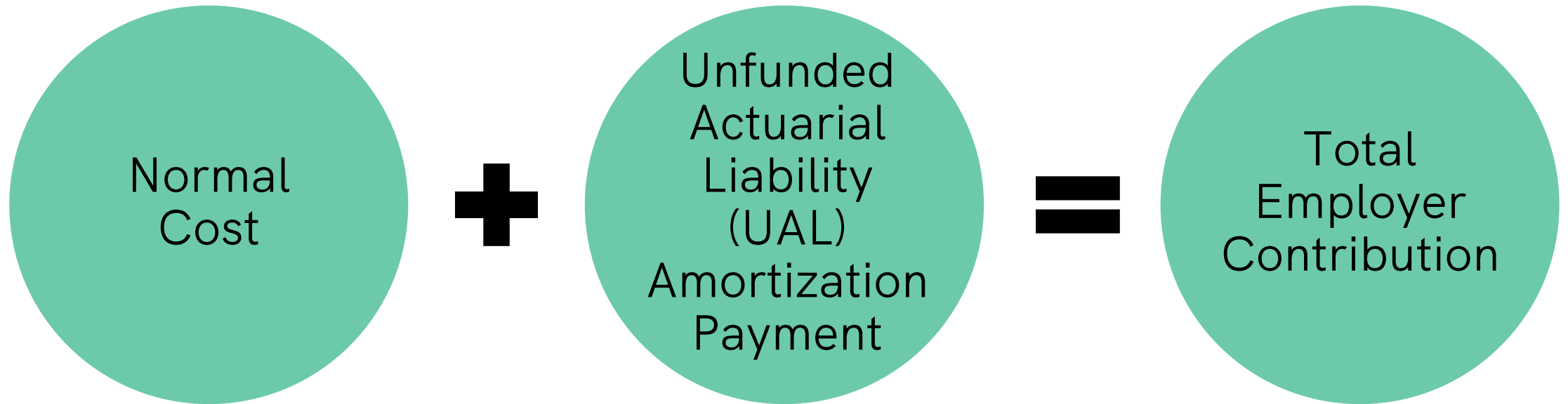
*Excludes Seasonal/Recurrent Employees

**Employer Paid Member Contributions
(EPMC)

Projected Transition From Classic Benefit to PEPRA



Actuarially Determined Contribution



Normal Cost – the cost for current service paid as a percent of payroll. Increases when payroll increases, decreases when payroll decreases

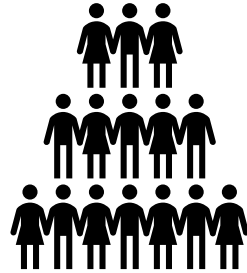
UAL Contribution – payment toward past service. Paid as a fixed dollar amount each year.

Assumptions Set Future Cost & Funding Expectations



Economic

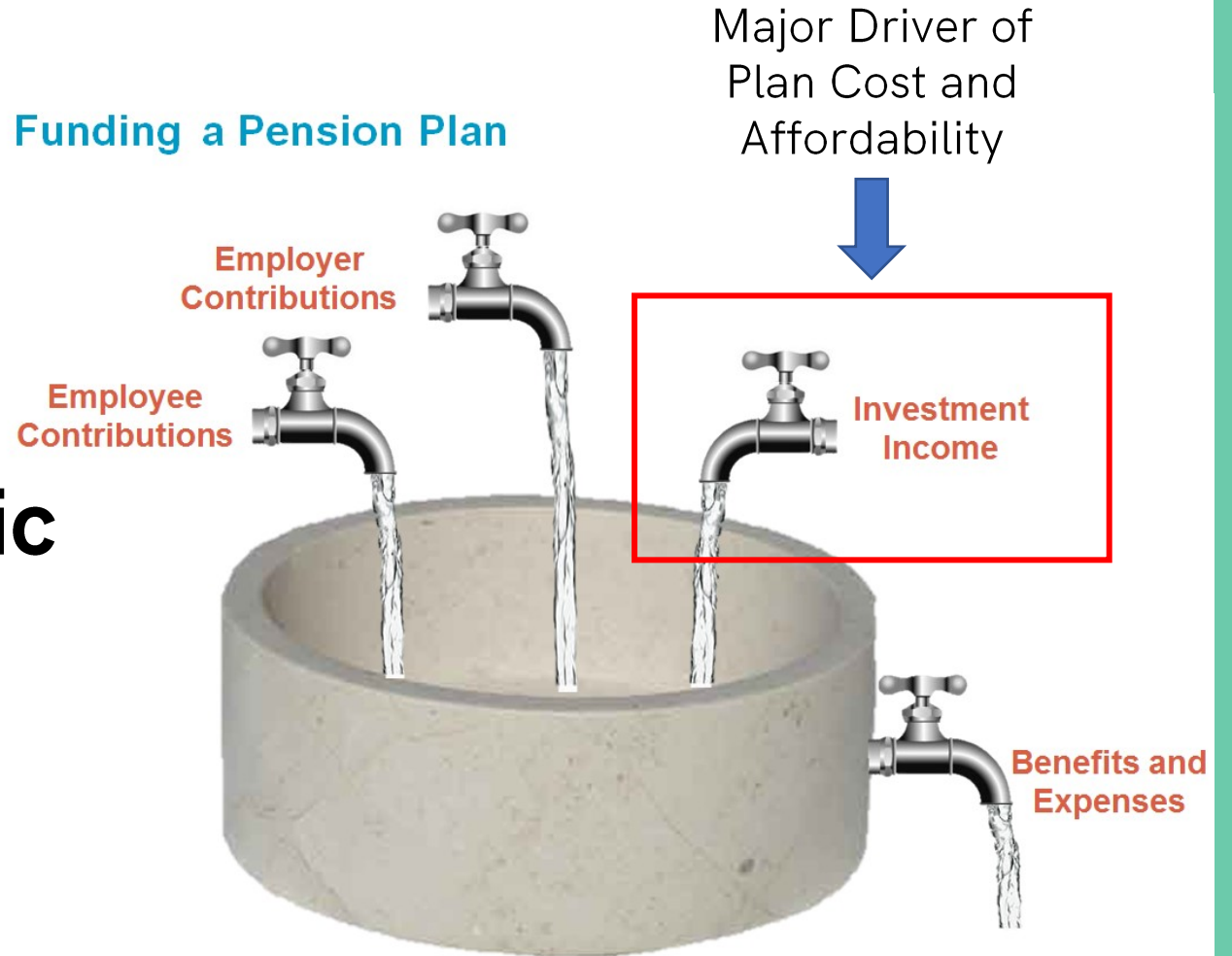
- Inflation
- Investment Return
- Salary Growth



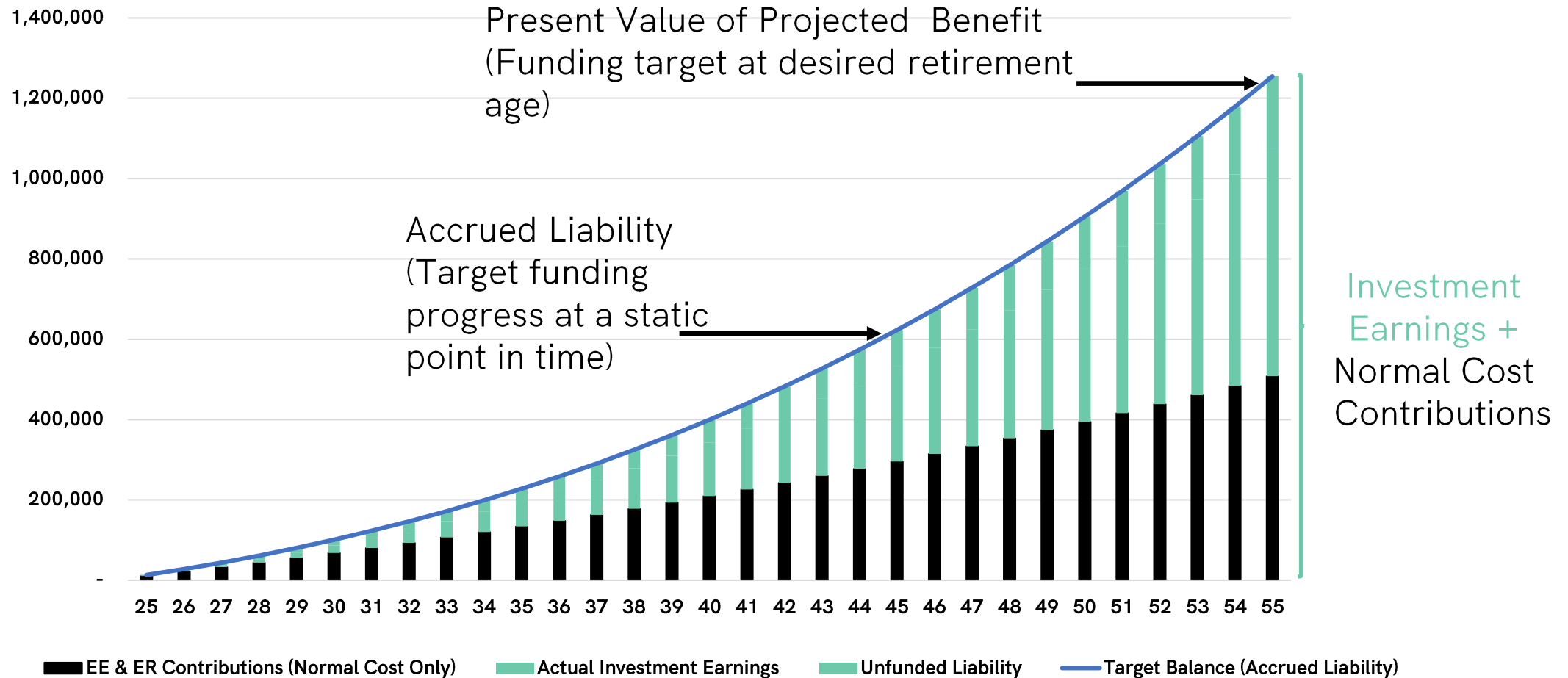
Demographic

- Retirement
- Disability
- Death
- Termination

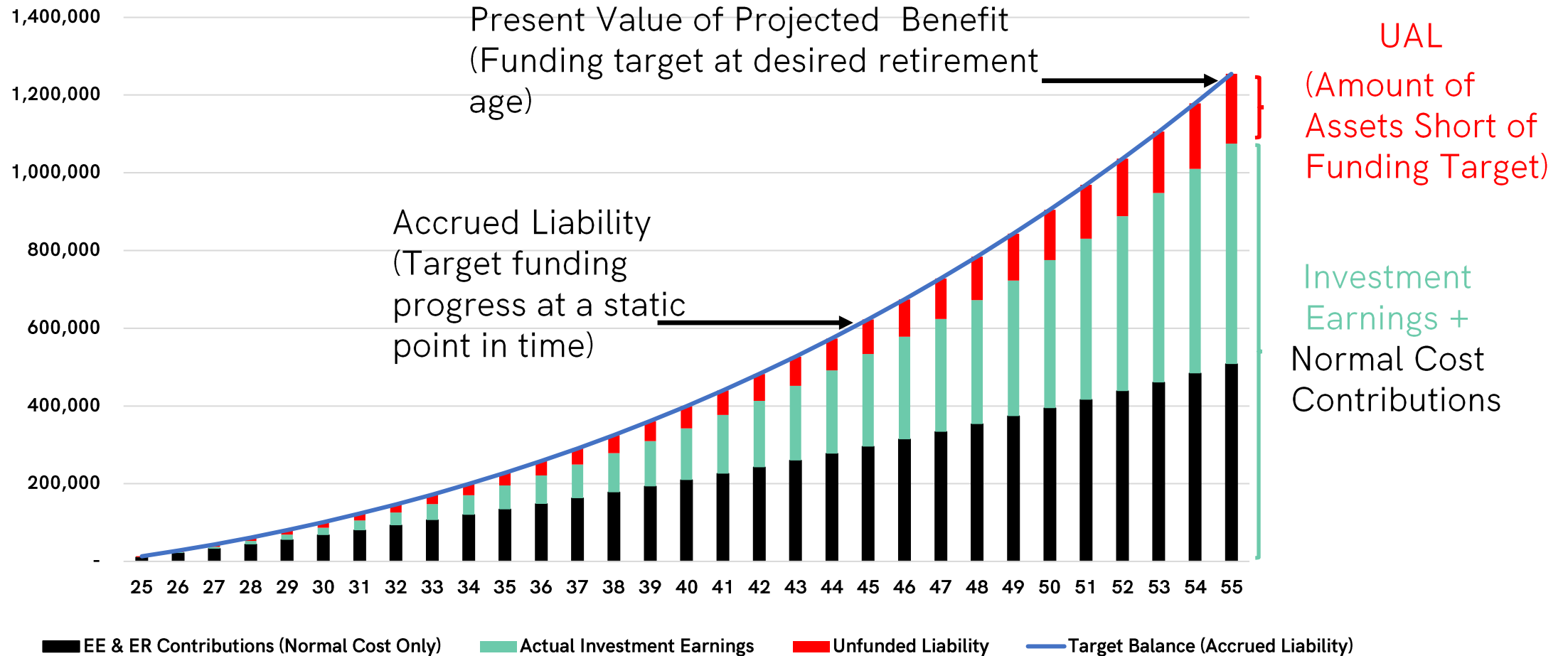
Funding a Pension Plan



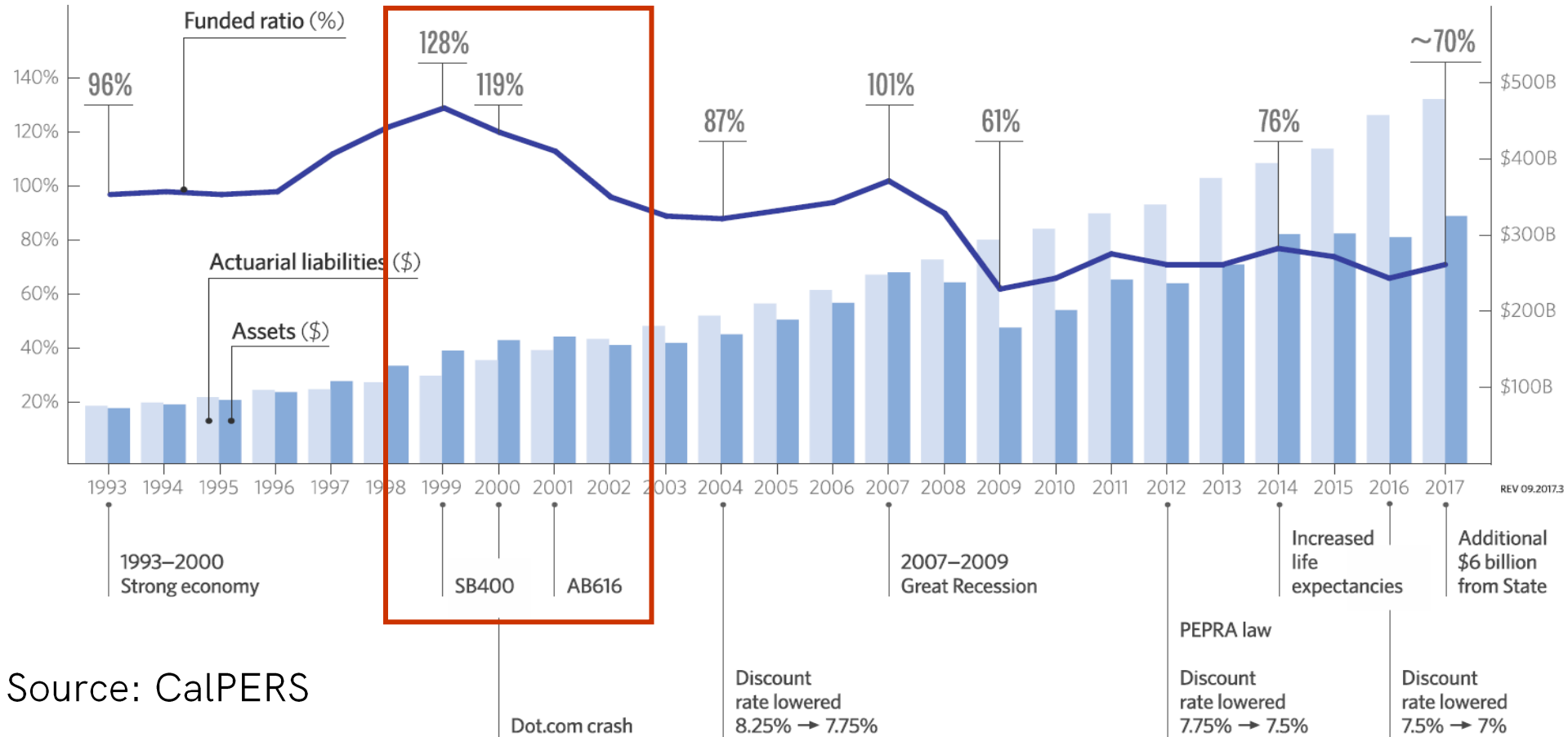
Retirement Plans Are Sensitive to Investment Earnings



Retirement Plans Are Sensitive to Investment Earnings

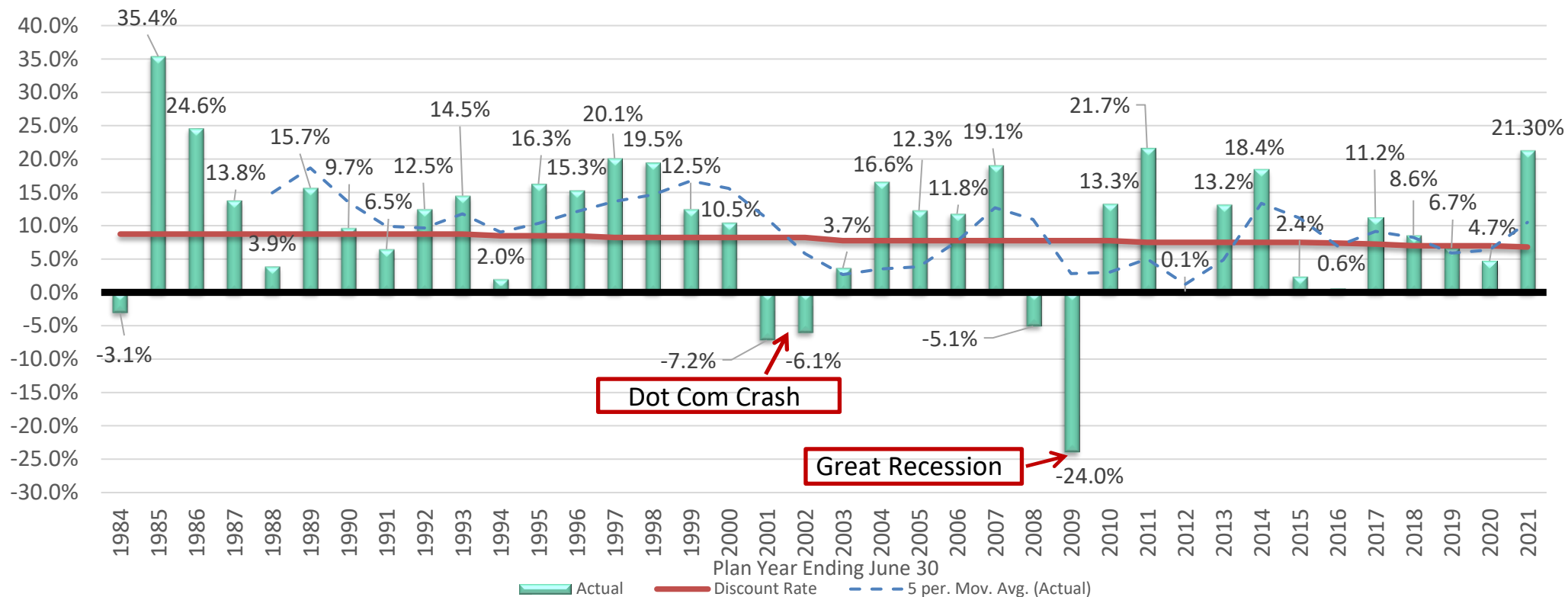


Historical Factors Impacting Funded Status



Source: CalPERS

CalPERS Historic Investment Returns

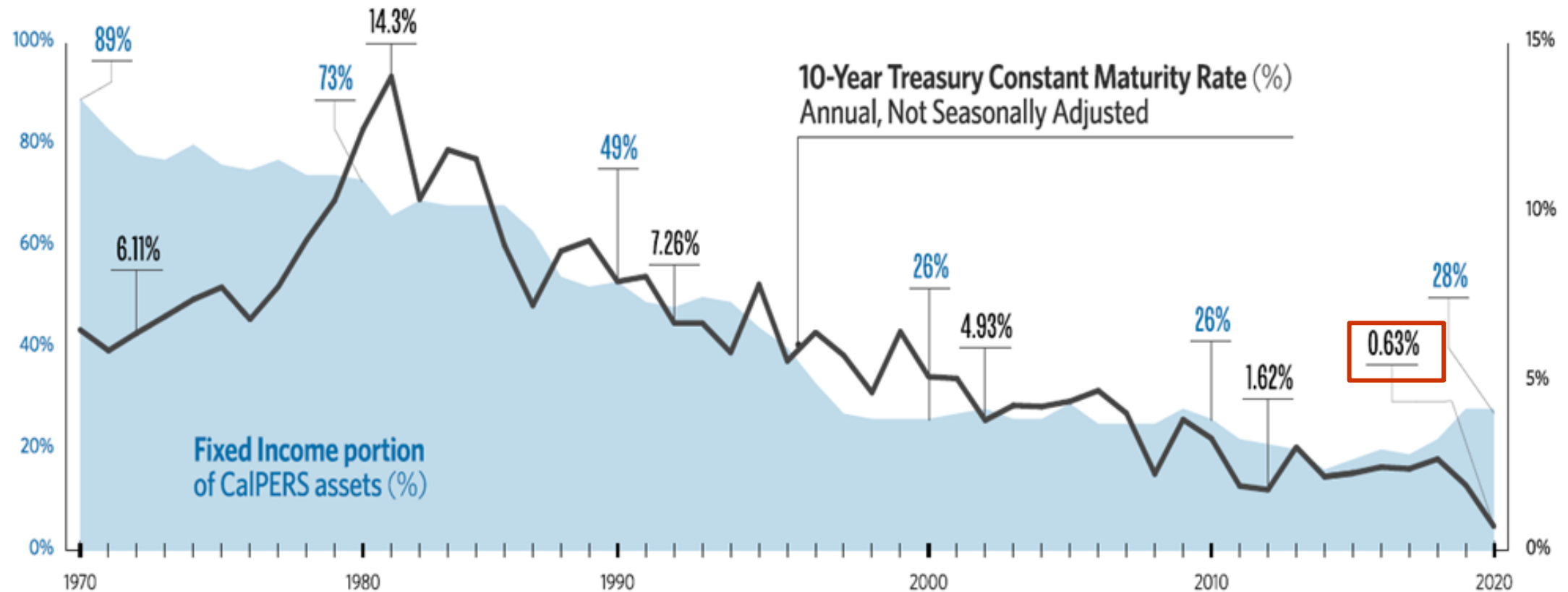


Historical Compound Annual Rate of Return					
	1 Year	5 Year	10 Year	20 Year	30 Year
Compound Annual Return	21.30%	10.40%	8.50%	6.90%	8.40%

Challenges to Achieving Target Returns

US Treasury Yields Reduced to Near Zero

We Need to Take Risks to Achieve Returns



Source: CalPERS

CalPERS Investment Return:

21.3%

(Preliminary Estimate)

Investment Return Triggers Lower Discount Rate
Provision of Funding Risk Mitigation Policy

New Discount Rate of 6.8% approved November 2021

<https://www.calpers.ca.gov/docs/funding-risk-mitigation-policy.pdf>

Funding Risk Mitigation Policy

Excess Investment Return	Reduction in Discount Rate	Reduction in Expected Investment Return
<i>If the actual investment returns exceed the discount rate by:</i>	<i>Then the discount rate will be reduced by:</i>	<i>And the expected investment return will be reduced by:</i>
2.00%	0.05%	0.05%
7.00%	0.10%	0.10%
10.00%	0.15%	0.15%
13.00%	0.20%	0.20%
17.00%	0.25%	0.25%

<https://www.calpers.ca.gov/docs/funding-risk-mitigation-policy.pdf>

Capital Market Survey

	Survey Parameter	2017 ALM*	2020 Mid-Cycle ALM Survey Median Value 03/31/20	2021 Initial ALM Survey Median Value 12/31/20	2021 Second ALM Survey Median Value 03/31/21
10-Year Expectations	Expected Return	6.1%	5.7%	4.9%	5.3%
	Expected Risk	11.4%	10.5%	11.5%	11.3%
	Expected Return/Risk	0.54	0.54	0.43	0.47
20-Year Expectations	Expected Return	7.0%*	6.6%	5.4%	6.2%
	Expected Risk	11.4%	10.5%	11.5%	11.3%
	Expected Return/Risk	0.73	0.63	0.47	0.55

Applying the survey results to our current portfolio mix, we do see lower expected returns and higher expected risk. Note the December 2020 survey results indicated a much steeper decline in our portfolio expected returns. This variability reflects both the degree of uncertainty in the projections, and the pace of events that influence those projections.

Board Decisions

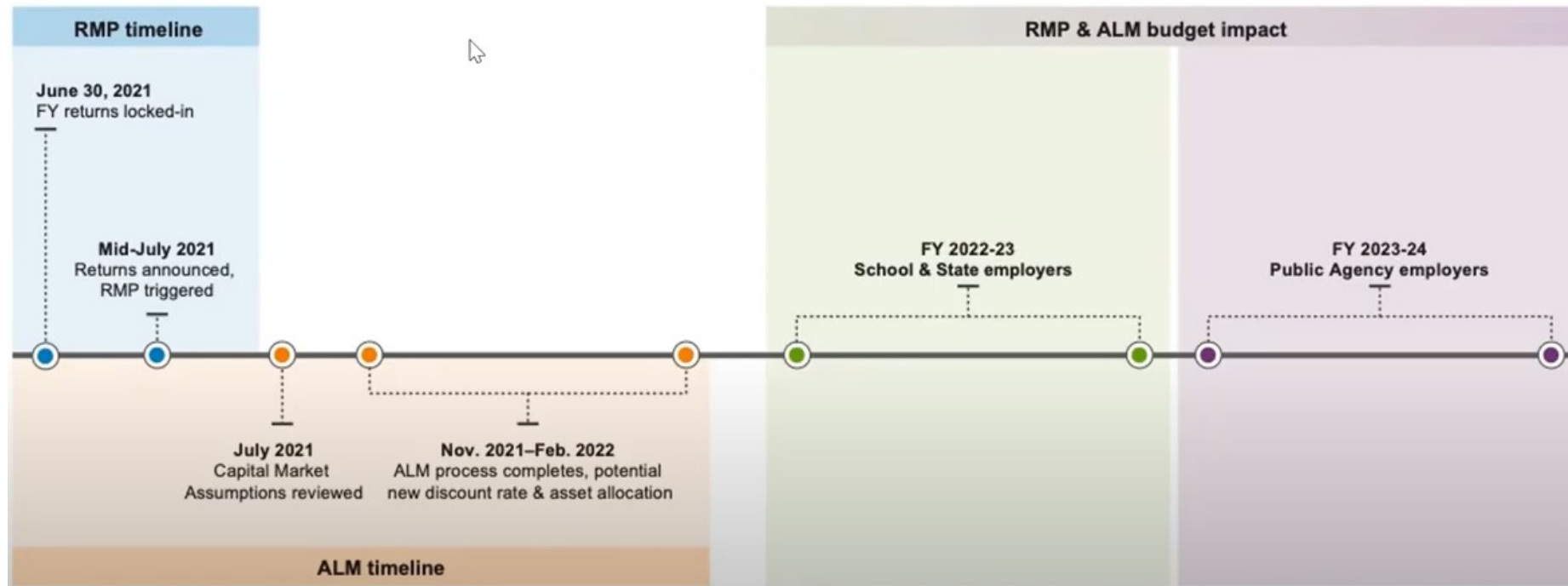
Reduced Discount Rate Assumption from 7% to 6.8%
Reduced Inflation Rate Assumption from 2.5% to 2.3%
Increased Wage Growth Assumption from 2.75% to 2.8%
Other Demographic Assumption Changes

[CalPERS Board Selects New Asset Allocation for Investment Portfolio, Keeps Discount Rate at 6.8%
- CalPERS](#)

<https://www.calpers.ca.gov/page/about/organization/facts-at-a-glance/asset-liability-management>

What is Happening When?

- CalPERS Board adopted new discount rate November 2021 (6.8%)
- Assets and Liabilities Adjusted in 2021 Valuation
- Net Positive Impact to Funded Status
- Contribution Rate impact begins FY 23-24 for public agencies (Torrance)



How is Torrance Doing?

Plan Funded Status (Millions)

Scenarios

Investment Return

Discount Rate

Mark Value of Assets (MVA)

Accrued Liability (AL)

Unfunded Liability (UAL)

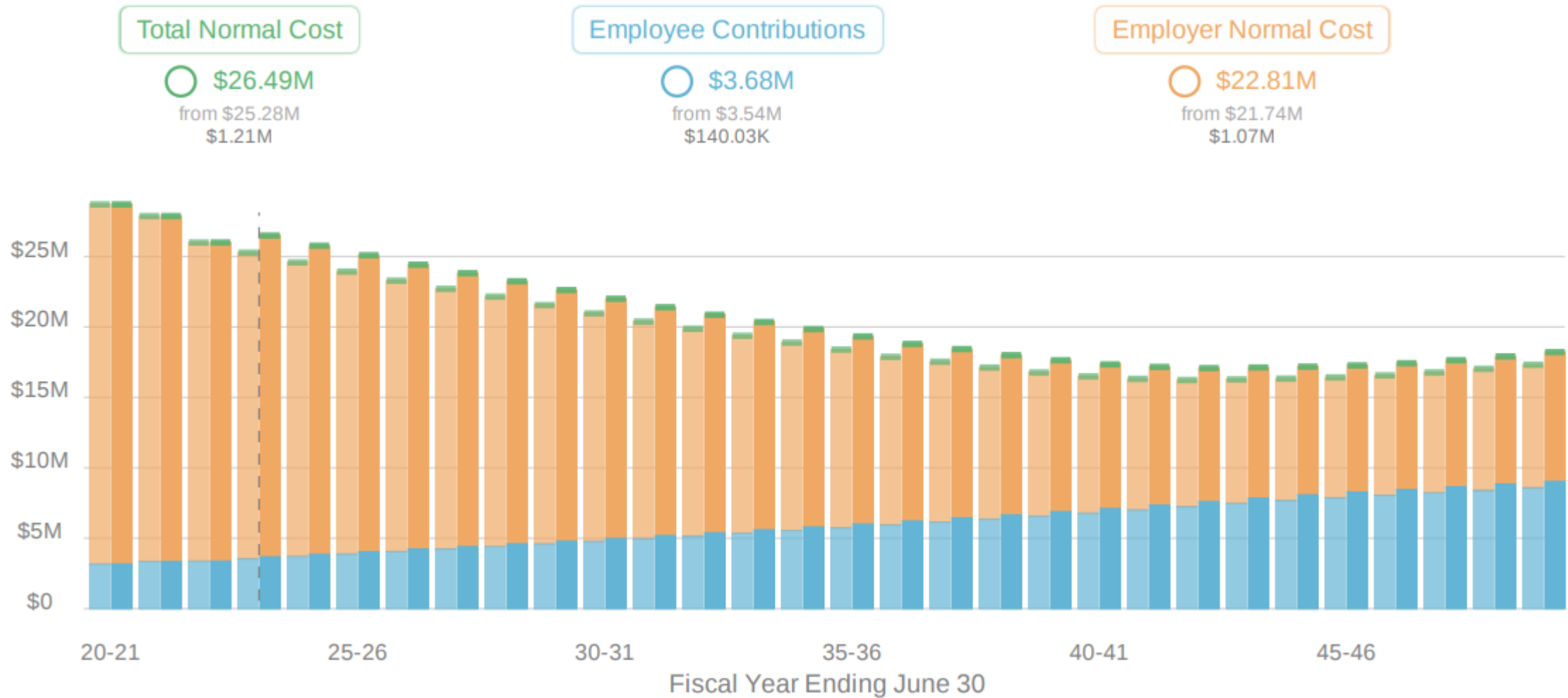
Funded Status (FS)

6/30/2021					
Status Quo	A	B	C	D	E
7%	21.3%	21.3%	21.3%	21.3%	21.3%
7%	7%	6.8%	6.5%	6.25%	6%
\$1,580	\$1,760	\$1,760	\$1,760	\$1,760	\$1,760
\$1,740	\$1,740	\$1,780	\$1,850	\$1,900	\$1,960
\$160	-\$20	\$20	\$90	\$140	\$200
91%	101%	99%	95%	93%	90%

Scenario Notes:

- A** Favorable investment return increases MVA \$180 Million and increases funded status 10% from status quo.
- B Baseline:** 6.8% discount rate increases AL \$40 Million and reduces funded status 2% from scenario A (Favorable Investment Return).
- C** 6.5% discount rate increases AL \$110 Million and reduces funded status 6% from scenario A (Favorable Investment Return).
- D** 6.25% discount rate increases AL \$160 Million and reduces funded status 8% from scenario A (Favorable Investment Return).
- E** 6.0% discount rate increases AL \$220 Million and reduces funded status 11% from scenario A (Favorable Investment Return).

Normal Cost – 7.0% vs 6.8% Discount Rate



Employer Normal Cost (without Employee Contributions) – 7% vs 6.8% Discount Rate

Total Employer Required Contribution

Annual Amortization Payment

Employer Normal Cost

Employee Contribution

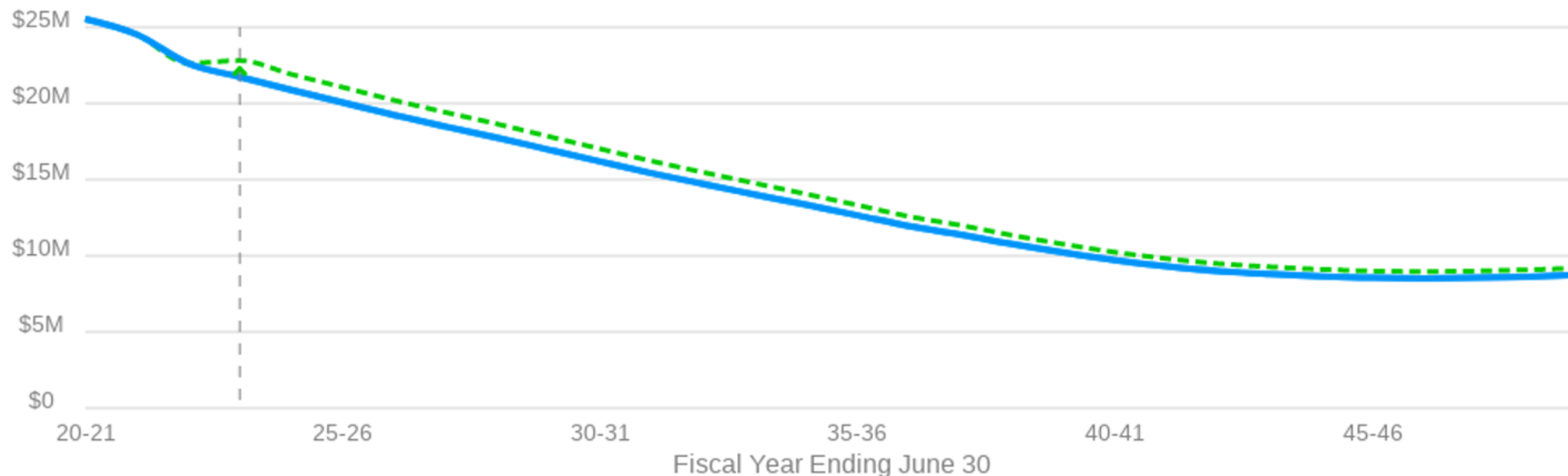
Default
(7% Discount Rate)

○ \$21.74M

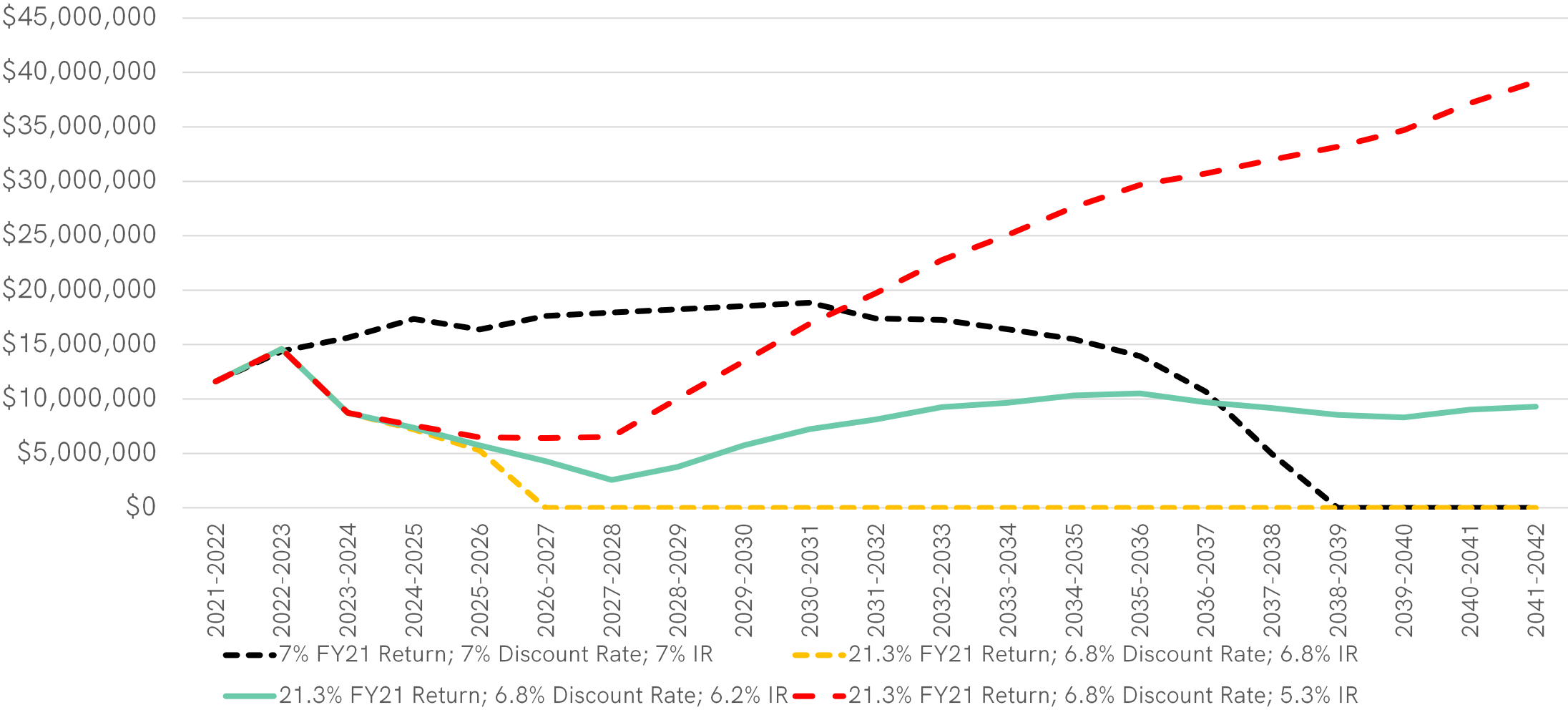
6.8% Discount Rate
(current)

○ \$22.81M

from \$21.74M
\$1.07M

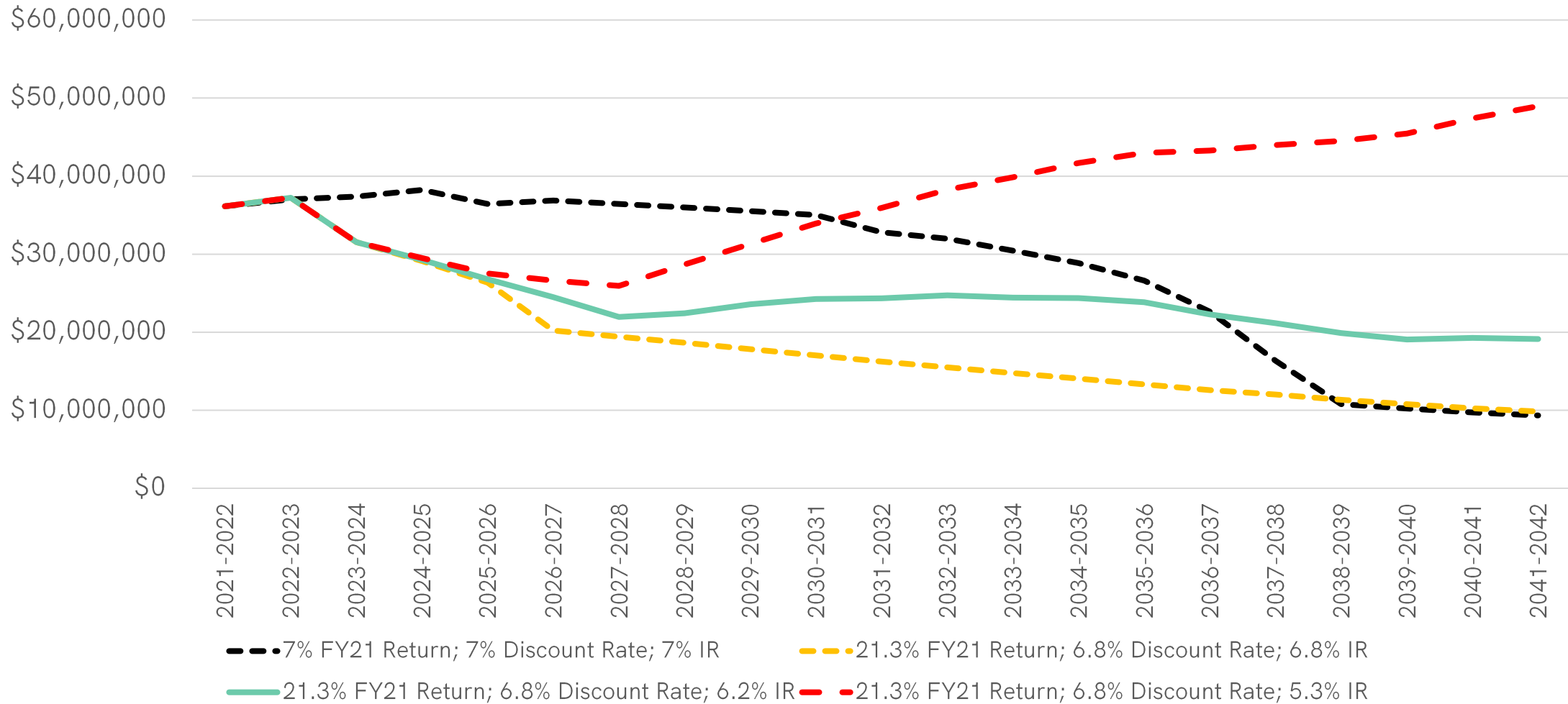


Unfunded Accrued Liability (UAL) Contribution



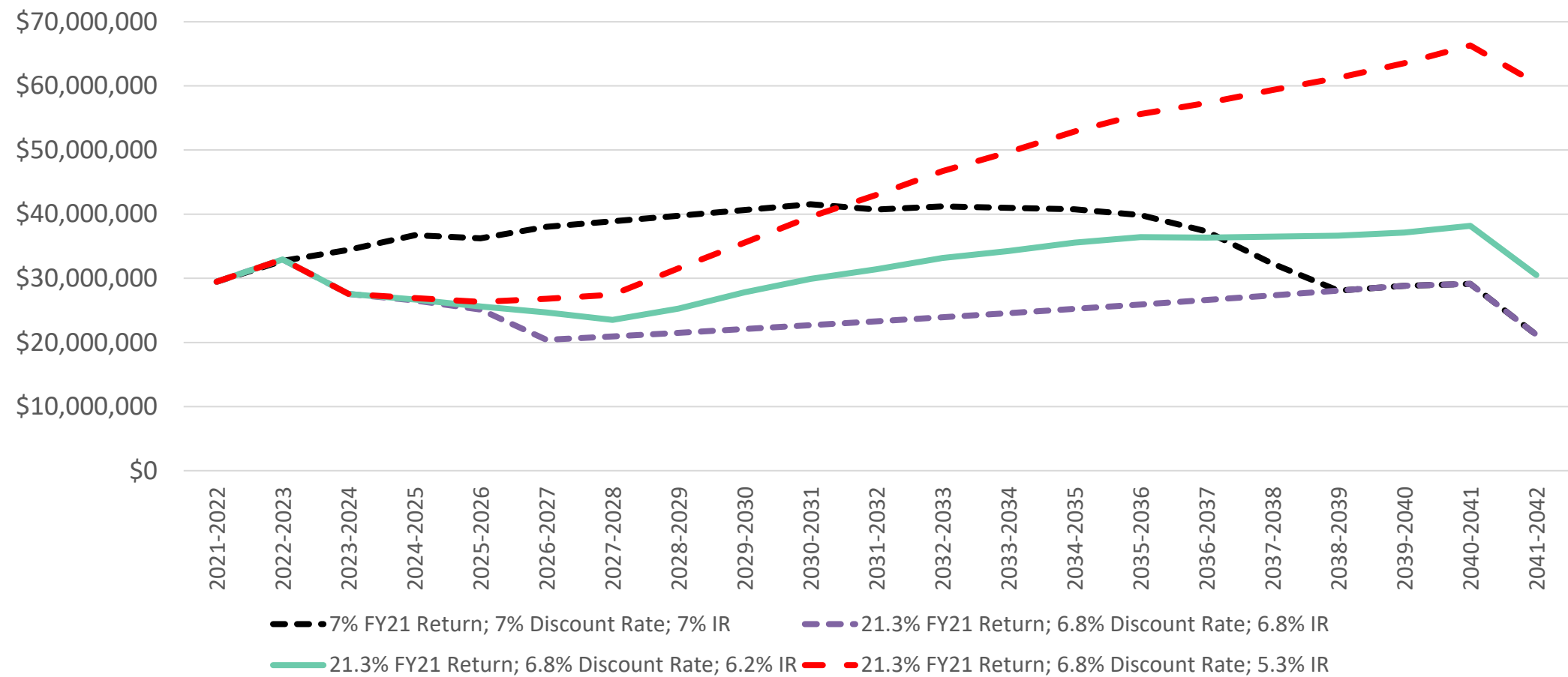
* Does not include Lease Revenue Bond payment of \$18.3 million

Total Employer Contribution – CalPERS only



* Does not include annual Lease Revenue Bond payments

Total Employer Contribution – CalPERS & LRBs



* Includes all annual Lease Revenue Bond payments

Questions



Disclaimer

While tested against actuarial valuation results, the software results will not necessarily match actuarial valuation results, as no two actuarial models are identical. The software offers financially sound projections and analysis; however, outputs do not guarantee compliance with standards under the Government Accounting Standards Board or Generally Accepted Accounting Principles. The software and this presentation are not prepared in accordance with standards as promulgated by the American Academy of Actuaries, nor do outputs or this presentation constitute Statements of Actuarial Opinion. GovInvest has used census data, plan provisions, and actuarial assumptions provided by Customer and/or Customer's actuary to develop the software for Customer. GovInvest has relied on this information without audit.

Reference Material



Resource Links

CalPERS Asset Liability Management (ALM) Resource Page

<https://www.calpers.ca.gov/page/about/organization/facts-at-a-glance/asset-liability-management>

CalPERS Asset Liability Management (ALM) March 15 Stakeholders Forum Video – Risk Concepts & Examples

<https://www.youtube.com/watch?v=EYOetWyKDwc>

CalPERS ALM Risk Concepts and Examples PDF

https://www.calpers.ca.gov/docs/board-agendas/202103/invest/item08a-01_a.pdf

CalPERS September 13 Investment Committee Video – Candidate Portfolios

<https://www.youtube.com/watch?v=cbcogSp3X5E&t=274s>

CalPERS September 13 Investment Committee -Candidate Portfolio PDF

https://www.calpers.ca.gov/docs/board-agendas/202109/invest/item08a-01_a.pdf

Source: CalPERS